Research Opportunity in the Laboratory of Computational Intensive Care Medicine

Setting

The Laboratory of Computational Intensive Care Medicine (https://lcicm.jhmi.edu/) in the Department of Anesthesiology and Critical Care Medicine (ACCM) at Johns Hopkins University School of Medicine is a group of physician-scientists and engineers whose overarching aim is to enhance the precision, efficacy, and outcomes of care delivered to critically ill patients. Members of the lab apply biologic hypotheses, mathematical and statistical models, artificial intelligence, and domain expertise to unravel patterns in data from sources such as electronic health records, high-frequency physiological recordings, and medical imaging. These patterns are resolved into health signatures that can be leveraged to gain knowledge on the mechanisms of critical illness and injury and to identify novel approaches to treatment.

Position Description

LCICM is recruiting a student to work part-time on a project focused on data-intensive classification and prediction in patients with traumatic brain injury. The successful applicant's primary task will be to curate, process and help analyze datasets extracted from the electronic health records and physiological recordings of patients admitted to intensive care units. The ideal candidate will be a Johns Hopkins Master's level student in Engineering and/or Computer Science who has a strong background in applied mathematics and statistics and excellent scripting and programming skills. Knowledge of machine learning, and experience working in data science environments (MATLAB, Python, R, SQL) are desirable. Support for tuition and stipend are available, if needed.

Interested students should email a resume and concise letter of interest to Dr Robert D. Stevens, Director Precision Medicine, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine, rstevens@jhmi.edu, before May 10, 2021.